



HARCHIES BRIDGE - 10.012

Program

Complete mission for architectural and structural design.

Concept

The new Harchies Bridge replaces a prestressed concrete bridge built in the 1950's during the construction of the Nimy-Blaton Canal near Mons.

Specific features

This integral abutment bowstring bridge spans 68 m. It is supported on two concrete abutments cantilevering continuously towards the bridge deck. Each edge of the steel arch is connected to the concrete abutment using very highstrength anchoring bars. The edges of the 13.4 m wide deck are covered with a steel plate. This plate, continuous over the entire length of the bridge, is used, with the slab, to counteract the tensile forces resulting from the arch thrust. The deck consists of a concrete slab with variable height, and is supported every 5 m by transverse steel members.

Distinctions

The structure is an integral abutment bridge. As a result, placing expansion joints between the deck and the abutments is unnecessary. Since the chosen structural typology was the first of its kind in Wallonia, the structure was monitored to know its behavior in time.

Study:	2009 - 2010	Length:	70 m
Execution:	2013 - 2014	Total budget:	3.000.000 € Vat Excl.
Architect:	Ney & Partners	State:	Completed
Client:	SPW	Images credits:	Ney & Partners
Site:	Bernissart, Belgium	Copyright:	Ney & Partners

